AMENDMENTS TO THE CLAIMS

Docket No.: 14113-00040-US

1. (Currently Amended) An optionally substituted oligomer or polymer comprising a repeat unit of formula (I):

$$\begin{array}{c|c}
Ar^{1} - A & Ar^{2} - A & Ar^{3} \\
Ar^{3} & Ar^{3} & Ar^{3}
\end{array}$$

(I)

wherein n is at least 1; each A is a nitrogen atom or optionally substituted phosphorus atom; each Ar^1 is the same or different and independently represents an optionally substituted arylene or heteroarylene; each Ar^3 is the same or different and independently represents an optionally substituted arylene or heteroaryl; Ar^2 represents an optionally substituted arylene or heteroarylene comprising a linking ring to which the two atoms A are both directly linked; and at least one of Ar^2 , and / or either or both of Ar^1 is substituted with at least one substituent

and at least a second repeat unit,

wherein the second repeat unit is selected from optionally substituted phenyl, spirobifluorene, indenofluorene, heteroaryl or dihydrophenanthrene.

- 2. (Original) An oligomer or polymer according to claim 1 wherein the substituent on Ar^1 or Ar^2 is selected from the group consisting of optionally substituted, aliphatic or alicyclic C_{1-20} alkyl; C_{1-20} fluoroalkyl; C_{1-20} alkoxy; halogen; nitro; cyano; sulfone and sulfoxide.
- 3. (Previously presented) An oligomer or polymer according to claim 1, wherein Ar² carries one or two substituents only.
- 4. (Previously presented) An oligomer or polymer according to claim 1, wherein each Ar¹ and Ar² are phenyl.

- 5. (Previously presented) An oligomer or polymer according to claim 1, wherein Ar³ is optionally substituted phenyl.
- 6. (Cancelled)
- 7. (Previously presented) An oligomer or polymer according to claim 1, wherein the further repeat unit is conjugated to the first repeat unit.
- 8. (Cancelled)
- 9. (Previously presented) An oligomer or polymer according to claim 1, wherein at least one Ar^3 is substituted by a substituent selected from the group consisting of optionally substituted, branched, cyclic or linear $\mathrm{C}_{1\text{-}20}$ alkyl or $\mathrm{C}_{1\text{-}20}$ alkoxy; $\mathrm{C}_{1\text{-}20}$ fluoroalkyl and fluorine.
- 10. (Previously presented) A blend comprising the oligomer or polymer according to claim 1, and an organic compound capable of at least one of the functions of hole transport, electron transport and emission.
- 11. (Cancelled)
- 12. (Cancelled)
- 13. (Currently Amended) A method of forming an oligomer or polymer comprising the step of oligomerising or polymerising an optionally substituted monomer of formula (II):

$$LG\left(-Ar^{1}-A-A-Ar^{2}-A-Ar^{3}-Ar^{1}\right)LG$$

(II)

wherein n is at least 1;

each A is a nitrogen atom or optionally substituted phosphorus atom;

each Ar¹ is the same or different and independently represents an optionally substituted arylene or heteroarylene;

each Ar³ is the same or different and independently represents an optionally substituted aryl or heteroaryl;

 Ar^2 represents an optionally substituted arylene or heteroarylene comprising a linking ring to which the two atoms A are both directly linked; and at least one of Ar^2 , and / or either or both of Ar^1 is substituted with at least one substituent

LG is the same or different and represents a leaving group capable of participating in a polycondensation mediated by a metal of variable oxidation state; and at least one of Ar^2 and / or either or both of Ar^1 is substituted with at least one substituent, and

a second repeat unit which is selected from optionally substituted phenyl, spirobifluorene, indenofluorene, heteroaryl or dihydrophenanthrene,

wherein said oligomerisation or polymerisation is mediated by a metal of variable oxidation state.

- 14. (Previously presented) A method according to claim 13 wherein each LG is independently a halogen or a moiety of formula -O-SO₂-Z wherein Z is selected from the group consisting of optionally substituted alkyl and aryl, and the monomer of formula (II) is oligomerised or polymerised in the presence of a nickel complex catalyst.
- 15. (Previously presented) A method according to claim 14 wherein the monomer of formula (II) is oligomerised or polymerised with a second aromatic monomer in the presence of a palladium complex catalyst and a base and
- a. each LG is the same or different and comprises a reactive boronic group and the second monomer comprises two reactive groups independently selected from halogen and a moiety of formula -O-SO₂-Z wherein Z is selected from the group consisting of optionally substituted alkyl and aryl, or

b. each LG independently comprises a halogen or a moiety of formula -O-SO₂-Z wherein Z is selected from the group consisting of optionally substituted alkyl and aryl, and the second monomer comprises two reactive boron groups which are the same or different.

- 16. (Previously presented) A method according to claim 13 wherein one LG is a reactive boron group; the other LG is a halogen or a moiety of formula -O-SO₂-Z wherein Z is selected from the group consisting of optionally substituted alkyl and aryl, and the monomer of formula (II) is oligomerised or polymerised in the presence of a palladium complex catalyst and a base.
- 17. (Previously presented) An optical device comprising the oligomer or polymer according to claim 1.
- 18. (Previously presented) An optical device comprising the blend according to claim 10.
- 19. (Previously presented) An optical device according to claim 17 wherein the oligomer or polymer or blend is located in a layer between a first electrode for injection of holes and a second electrode for injection of electrons.
- 20. (Previously presented) An optical device according to claim 17, wherein the optical device is an electroluminescent device.
- 21. (Previously presented) A switching device comprising an oligomer or polymer according to claim 1.
- 22. (Previously presented) A field effect transistor comprising an insulator having a first side and a second side; a gate electrode located on the first side of the insulator; an oligomer or polymer according to claim 1 located on the second side of the insulator; and a drain electrode and a source electrode located on the oligomer or polymer.
- 23. (Original) An integrated circuit comprising a field effect transistor according to claim 22.
- 24. (Currently Amended) An optionally substituted oligomer or polymer comprising a repeat unit of formula (I):

$$\left(\begin{array}{c}
Ar^{1} - A - A - Ar^{2} - A - Ar^{3} \\
Ar^{3} - Ar^{3} - Ar^{3}
\end{array}\right)$$

(I)

wherein n is at least 1; each A is a nitrogen atom or optionally substituted phosphorus atom; each Ar^1 is the same or different and independently represents an optionally substituted arylene or heteroarylene; each Ar^3 is the same or different and independently represents an optionally substituted arylene or heteroarylene comprising a linking ring to which the two atoms A are both directly linked; and at least one of Ar^2 , and / or either or both of Ar^1 is substituted with at least one substituent and wherein the substituent on Ar^1 or Ar^2 is selected from the group consisting of optionally substituted, aliphatic or alicyclic C_{1-20} fluoroalkyl; halogen; nitro; cyano; sulfone and sulfoxide and

at least a second repeat unit, wherein the second repeat unit is selected from optionally substituted, fluorene, spirobifluorene, indenofluorene or dihydrophenanthrene.

- 25. (Previously presented) The oligomer or polymer according to claim 1 wherein the substituent on Ar^1 or Ar^2 is selected from the group consisting of optionally substituted, aliphatic or alicyclic C_{1-20} fluoroalkyl; halogen; nitro; cyano; sulfone and sulfoxide.
- 26. (Previously presented) The oligomer or polymer according to claim 1 wherein the substituent on Ar^1 or Ar^2 is selected from the group consisting of optionally substituted, aliphatic or alicyclic C_{1-20} fluoroalkyl or fluorine.
- 27. (Currently Amended) The oligomer or polymer according to claim 24, which further emprises at least a second repeat unit, wherein the second repeat unit is selected from optionally substituted phenyl, fluorene, spirobifluorene, indenofluorene, heteroaryl or dihydrophenanthrene.
- 28. (Cancelled)

29. (Previously presented) The oligomer or polymer according to claim 1 wherein the second repeat unit is an optionally substituted spirobifluorene.

- 30. (Previously presented) The oligomer or polymer according to claim 1 wherein the second repeat unit is an optionally substituted indenofluorene.
- 31. (Previously presented) The oligomer or polymer according to claim 1 wherein the second repeat unit is an optionally substituted dihydrophenanthrene.